REMARKS

Applicants respectfully traverse the objections and rejections in the present Office Action.

Claims 1–60 are pending in the present application and all stand rejected. Additionally, the drawings and specification have been objected to. The Applicants respectfully request reconsideration of the objections and rejections in light of the following remarks.

The informal drawings of Figs. 3–6 have been objected to as not being of sufficient quality. With this Amendment, Applicants include replacement drawing sheets for FIGs. 3-6 that are believed to be in compliance with 37 C.F.R. §1.1 21(d). Accordingly, Applicants request their consideration and approval.

The Applicants thank the Examiner for courtesy extended in granting a telephone interview with the undersigned representative of Applicants on December 22, 2004.

The title of the invention has been objected to as allegedly not being descriptive; that is, not clearly indicative of the subject matter to which the claims are directed. The Applicants respectfully disagree as the title matches the preambles of the pending claims and, thus, reflects the claimed subject matter. If the Examiner maintains this objection, Applicants invite the Examiner to propose an alternate title that is believed to resolve this objection.

The disclosure also is objected to based on the use of the acronym VBV. The amendment made to the specification by this amendment is believed to address and resolve this objection. In particular, the spelled-out acronym "video buffer verifier" that has been added to the specification is not believed to add new matter as this term is well-known in the art. As an example, the Kato reference cited by the Examiner frequently utilizes this acronym. Accordingly, the Applicants request withdrawal of this objection.

Claims 23, 25, 31, 36–42, 52, 54, and 57 were rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the enablement requirement. The Applicants respectfully traverse this rejection as follows.

In particular, claim 36 was rejected based on the assertion that the claimed "adjusting a $t_{earliest}$ value and a t_{latest} value for each packet of a plurality of packets for each data stream of the plurality of data streams" is not sufficiently enabled by the specification. The Applicants respectfully disagree with this assertion, and submit first that at least lines 12–19 of page 17, as well as Fig. 13, teach this claimed feature. More importantly, one skilled in the art could, based on these teachings and other portions of the present application, such as the multiplexer illustrated in Fig. 12 and the accompanying descriptions bridging pages 16 and 17, know how to make and use the claimed method without undue experimentation. Additionally, this claimed subject matter is also disclosed in that the $t_{earliest}$ and t_{latest} are defined as the earliest possible occurrence of a packet within constraints of the upper and lower limits 402 and 401 and the latest possible occurrence within the same constraints, respectively, and that the lower and upper limits 401 and 402 may be shifted, it necessarily follows that the $t_{earliest}$ and t_{latest} are adjustable. Accordingly, the Applicants respectfully submit that claim 36 is enabled to one of ordinary skill in the art to make or use the invention without undue experimentation.

Furthermore, the subject matter of claim 40 was asserted as not being enabling to one of ordinary skill in the art. In particular, the Office Action asserts that the specification does not describe how to derive buffer delay information from the plurality of data streams. The Applicants disagree with this assertion and submit that at least lines 27–30 of page 17 in the present application, as well as lines 16–18 of page 13, explicitly disclose this element. In particular, since the input data streams are taught to include this information, one of ordinary

skill in the art would certainly know how to extract such signaled information according by any number of known methodologies. Accordingly, a particular description of how such information is extracted is not necessary for purposes of §112, first paragraph, since one skilled in the art would be able to make or use the claimed feature. Accordingly, the Applicants respectfully request reconsideration and withdrawal of this rejection.

Claims 23, 25, 31, 52, 54, and 57 are asserted as not being enabled based on the assertion that the specification does not adequately describe deriving a new current time value based on the size of an empty packet, marked candidate, or selected candidate. The Applicants respectfully disagree and submit that at least Fig. 10, steps 1003, 1005 and 1008 disclose this claimed feature in the specification. Additionally, page 15 of the specification describes these processes illustrated in Fig. 10. Furthermore, as described on page 15, lines 26–29, calculation of current time value is performed by selecting a lowest value of a first earliest time constraint of a packet and the second earliest time constraint of a packet of the second plurality of packets. Accordingly, one of ordinary skill in the art would be able, without undue experimentation to know how current time value is calculated given any size of packet, including an empty packet, a marked candidate or a selected candidate. Accordingly, the Applicants respectfully request reconsideration and withdrawal of this rejection.

Claims 1–35 and 43–60 were rejected under 35 U.S.C. §112, second paragraph, for allegedly being indefinite. In particular, claims 1, 33, and 43 were rejected on the assertion that the element "obtaining buffer delay information" is unclear as it is not understood what buffer delay means as used in the application. The Applicants respectfully disagree that this term is indefinite. Buffers are well-known in the art and, as defined in IEEE's "The Authoritative Dictionary of IEEE's Standard Terms," Seventh Edition, a buffer is "a device in which data are

stored temporarily in the course of transmission from one point to another." Thus, taking this accepted definition, buffer delay information would include time in which data are temporarily stored by a buffer. Accordingly, the Applicants submit that this element sets out and circumscribes particular subject matter with a reasonable degree of clarity and particularity as analyzed, not in a vacuum, but in light of the content of the present application, the teachings of the prior art, and claim interpretation that would be given by one possessing ordinary skill it the art. (See MPEP §2173.02). Accordingly, the Applicants request reconsideration and withdrawal of this rejection.

Claims 4, 6, and 13 were also rejected under 112, second paragraph, due to the use of the terms "substantially constant" and "constant" frame rate. The Applicants respectfully disagree that these terms are indefinite. First, the word "constant," is defined as "continually occurring or recurring, regular." (See Webster's Collegiate Dictionary, tenth edition). Accordingly, this term is believed to be definite. Regarding the term "substantially constant", the use of the term "substantially" is recognized as often being used to describe a particular characteristic of a claimed feature and has been held in numerous court cases to be definite. In particular, the inquiry as to whether this term is definite rests on whether one of ordinary skill in the art would know what is meant. The Applicants respectfully submit that in the present claims, the term "substantially constant" is definite because one of ordinary skill in the art would know that this means, for example, a frame rate that although not exactly constant, is nonetheless substantially so, thus affording broader claim protection.

During the Examiner interview, the Examiner admitted that the term "substantially constant" is not indefinite. However, the Examiner explained that the usage of both terms "constant" and "substantially constant" is believed to lead to confusion and is somewhat

contradictory. In the context of their usage in the claims, the Applicants disagree. Claim 4, which depends directly from claim 1 directly, uses "constant" to describe the bit rate. Claim 6, which also depends directly from claim 1, use "substantially constant" to describe this same concept. Since claim 4 and 6 do not depend one off the other, the claimed terms do not contradict and are definite. Further, claim 13 does not contain either of the terms "contant" or "substantially constant." Accordingly, the Applicants respectfully submit that these claims are definite and that the rejection should be withdrawn.

Claims 1–9, 11–16, 19, 32–39, and 41–48 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kato (U.S. Patent No. 6,188,700) in view of VanDeusen (U.S. Patent No. 6,598,172). The Applicants respectfully traverse for the following reasons.

With respect to independent claims 1, 33, and 43, the Office Action asserts that Kato teaches, among other things, the claimed element of "determining a first lowest bit occurrence constraint based on the first time stamped information and the buffer delay information," as featured in claim 1 as an example. As argued in Applicants' previous response, Kato does not teach or suggest this feature.

Moreover, the present Office Action newly asserts that "locating zigzag locus of the encoder system to the left of the line cd on [sic] Fig. 3 and starting on b0, as cd line represents the bit occupancy quantity." Kato actually teaches, however, that line c-d merely expresses the constant output bit rate R from an encoder buffer 13 (see col. 3, lines 33–35). Although the distance and direction of the vertical axis from a point in time t on the line c-d to the step-like locus to the left of this line represents a bit occupancy quantity at this time point, bit occupancy is not the same as bit occurrence, as the Office Action appears to incorrectly equate these two disparate concepts in order to make the rejection. This teaching in no way shows that Kato

contemplates determining a first lowest bit occurrence constraint, but, as argued above, line c-d is merely an expression of a constant output bit rate from an encoder buffer. Accordingly, this element, as well as other elements of claim 1 not mentioned here, are not taught or suggested by Kato.

With respect to claim 33, as first lowest bit occurrence, as argued above, is not taught or suggested by Kato, a calculator to accomplish this task as featured in claim 33 is not taught or suggested by Kato. Accordingly, the Applicants submit that this claim is allowable.

Additionally, with respect to claim 43, the elements of this claim are not taught or suggested by Kato or VanDeusen as argued above.

With respect to dependent claims 2–9, 11–16, 19, 32, 34–35, and 44–48, these claims are allowable on their merits and also at least for the reasons presented above with respect to independent claims 1, 33, and 43, upon which these claims respectively depend.

With respect to independent claim 36, the Office Action asserts that Kato teaches, among other things, calculating earliest and latest time constraints as argued in the rejection of claim 1. Because Kato and VanDeusen do not teach or suggest calculation of a first lowest or highest bit occurrence constraint, however, it necessarily follows that these references additionally fail to teach or suggest determining first earliest or latest time constraints based on these bit occurrence constraints. Moreover, the concept of determining earliest and latest time constraints appears to be completely absent from either Kato or VanDeusen. Accordingly, claim 36 is believed to be allowable over the prior art of record.

With respect to rejected dependent claims 37–39, these claims are believed allowable on their merits and also for the reasons presented above with respect to independent claim 36.

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The Applicants note that claims 10, 17–18, 20–31, 40, and 49–60 were not rejected on the merits and are presumed to be allowable over the prior art of record. Moreover, the Applicants submit that these claims are allowable over the prior art of record and also fulfill the requirements of §112, first and second paragraphs. In the Examiner interview, the Examiner appeared to accede that these claims would be allowable on their merits, but did not indicate so because of outstanding 112 rejections.

In light of the foregoing, Applicants respectfully submit that the present application is in condition for allowance and respectfully requests that a Notice of Allowance be issued in this case.

Respectfully submitted,

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